

Concept of Operations Overview

Chris Hart September 25, 2008



Background

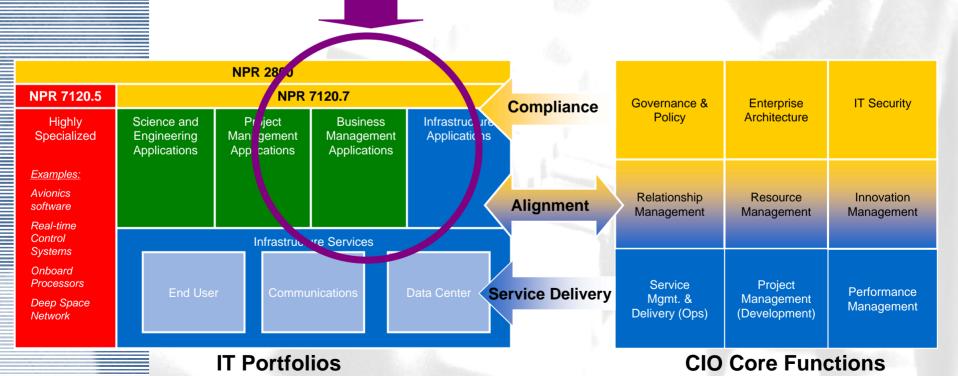
- NASA has been improving and modernizing its business processes for enhanced information delivery. Examples Include:
 - Integrated Enterprise Management Program (IEMP)
 - Competency Management System
 - Planning Programming and Budget Execution Process (PPBE)
- Need Integrated Vision for Agency-Wide Business Systems to:
 - support business modernization investment decisions
 - provide Operations' guidance for system definition and design
 - form an overall basis for long-range planning
 - addresses recommendations in the GAO report on business modernization (GAO-07-691)
- ConOps Provides the Vision for Integrating Business Systems



Integration into CIO's Management Strategy

The CIO's Strategy for Managing IT Investments

The ConOps will describe the future state for the CIO's Business Management Applications Portfolio





Business Management Portfolio Examples

Portfolios	Sub-Portfolios	Contents	Example
Science and Engineering Portfolio	•Engineering Tools •Scientific Tools •Product Lifecycle Mgmt.	CAD/CAM/CAE Science (Modeling, Simulation) Technical library, Bill of Materials, Collaboration, Configuration Mgmt.	• NASTRAN •MCAD •Windchill •AWIPS •Vignette •VSDE •NSPIRE •NEN
Project Management Portfolio	•Project Planning & Execution •Supply/Demand Planning	Suites (integrated systems), Scheduling, EVM, Budgeting, Risk Management, Cost Management Supply/demand planning, service parts, sourcing management	• Primavera •NGIN •ARM •DOORS •COBRA •Cost Estimating Tools
Business Management Portfolio	•Analytics •Financials •Human Capital Management •Corporate Services •Operations Support •Asset Management •Procurement/Contracts	Operations, workforce, financial analytics Financial/managerial accounting, budgeting, gov. Talent mgmt., health/benefits mgmt., workforce Travel mgmt, health/safety compliance, legal, legislative affairs Quality mgmt., global trade svcs/mgmt. Plant, property and equipment, real estate mgmt. Procurement, contracts mgmt., grants management	• Crystal Reports, BW •SAP •HCIE •SATERN •CMS •CMM •Funds Control •WebTADS •N2 •NODIS?
Infrastructure Application Portfolio	•Web portals/Web Services •Business Process Monitoring •Messaging •Collaboration •Help Desk	•Enterprise portal enablement, web sites, search engines •BPM, Microflow •Email, calendaring, IM • Knowledge mgmt., file sharing, document/records mgmt. • Help desk applications/knowledge mapping	• NOMAD •MAXIMO •Inside NASA •Remedy •NetIQ, NODIS? •Google •CBACS



Concept of Operations Development

- ConOps is written from a user's perspective
 - It should describe in layman's terms:
 - what exists currently
 - where the Agency is heading
 - It is not a technical specification for new system development
 - Includes all NASA stakeholders

Information Providers	Information	Information
- CFO	Consumers	Consumers
- CIO	- MDs	 Internal Controls
Human Capital	Centers	Strategic
 Institutions and 	- OSMA	Communications
Management	- PA&E	- Innovative
Procurement	- OCE	Partnership Program
Information Service Provi	ders - OPII	- External Relations
– IEMP	- GC	 Chief Health and Medical Officer
- NSSC	– IG	Wedical Officer
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- Development planned through a series of workshops
- Target draft completion July 08



Concept of Operations Document

IEEE Standard 1362-1998 defines the content of ConOps as:

1. Scope

- a) Identification
- b) Document Overview
- c) System Overview
- 2. Referenced Documents

3. Current system

- a) Background, objectives and scope
- b) Operational policies and constraints
- c) Description of current system
- d) Modes of operation
- e) User classes and other involved personnel
- f) Support Environment
- 4. Justification for and nature of changes
 - a) Justification of changes
 - b) Description of desired changes
 - c) Priorities among changes
 - d) Changes considered but not included

5. Concepts for the proposed system

- a) Background, objectives and scope
- Operational policies and constraints
- c) Description of current system
- d) Modes of operation
- User classes and other involved personnel
- f) Support Environment

6. Operational Scenarios

- 7. Summary of impacts
 - a) Operational Impacts
 - b) Organizational Impacts
 - c) Impacts during development
- 8. Analysis of the proposed system
- 9. Notes



"Scope" Overview

Guidance

- Focus on operational considerations, practical solutions
 - Exclude technological developments (i.e., software and platform)
 - Assume the OCIO and service providers manage technology choices
 - Service providers develops the system to meet the operational needs
- Include all Center-based systems that exist for lack of Agencywide system

Objectives

- Agree on the definition of agency-wide business systems
 - Business System Portfolio
- Existing Systems
 - Identify system attributes that warrant inclusion
 - Agree on attributes that exclude business information systems
- Future Systems
 - Identify current gaps
- Agree upon end-to-end scenarios
- Agree on a fixed planning horizon (e.g., five years, seven years)



Environmental Interface

- HQ-EMD was contacted late in this process
- Asked to validate environmental management data already collected
- Decision was made to spearhead the effort from HQ-EMD
- CONOPs datacall sent to center environmental offices
- Information provided by centers for input into overall CONOPs effort
- Future actions ...



Environmental Data Collections

- Air
- Cultural Resources
- Hazardous Materials
- Hazardous Waste
- Natural Resources
- NEPA
- Pollution Prevention
- Noise
- Pesticides
- Petroleum, Oils, Lubricants
- Solid Waste
- Storage Tanks
- Asbestos

- Lead Based Paint
- Radon
- PCBs
- Wastewater
- Drinking Water
- Energy Management
- Restoration
- Document Management
- Audit Findings Tracking
- Internal Inspections
- Environmental Management Systems
- Permit Tracking